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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,613	02/05/2004	Michael Kovacs	ORACL-01301US1	5069
80548 7590 11/10/2010 FLIESLER MEYER LLP 650 CALIFORNIA STREET 14TH FLOOR SAN FRANCISCO, CA 94108				
EXAMINER MUHEB'BULLAH, SAJEDA				
ART UNIT 2174		PAPER NUMBER		
NOTIFICATION DATE 11/10/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OFFICEACTIONS@FDML.COM

### Office Action Summary

**Application No.**

10/772,613

**Applicant(s)**

KOVACS ET AL.

**Examiner**

SAJEDA MUHEBBULLAH

**Art Unit**

2174

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 15-21, 28, 29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-21, 28, 29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is responsive to Amendment filed on 08/26/2010.
2. Claims 1-8, 15-29, and 31-34 are pending in this application. Claims 1, 3-8, 15-21, 28 and 31-34 have been amended and claims 22-27 have been canceled. This action is made Final.

#### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "builder component capable of creating a master tree data structure based on a present state of all deployment descriptor files; wherein the master tree data structure represents resources associated with the plurality of applications, wherein the master tree data structure includes a first sub-tree that corresponds to a first application of the plurality of applications; creating a first separate tree data structure based on a current state of source files in a first project directory of the plurality of directories associated with the first application, wherein the first separate tree data structure represents resources associated with the first application; comparing the first sub-tree that corresponds to the first application in the master tree data structure with the first separate tree data structure; and refreshing the master tree data structure based on the first separate tree data structure if the first sub-tree in the master tree data structure is different from the first separate tree data structure" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6-8, 15, 18-21, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. (“Hapner”, US 6,892,382) in view of Susarla et al. (“Susarla”, US 2004/0015936) and further in view of Kiernan et al. (“Kiernan”, US 5,701,137).

As per claim 1, Hapner teaches a system for supporting application deployment, comprising:

a plurality of deployment descriptor files that are adapted to describe deployment and configuration information of a plurality of applications (col.5, lines 38-46) deployed on a web server (col.5, lines 10-22), wherein each application of the plurality of applications is associated with at least one deployment descriptor file of the plurality of deployment descriptor files (col.6, lines 55-67) and each said application is deployed in a project directory of a plurality of directories in the web server (col.7, lines 1-7).

However, Hapner does not teach a builder component capable of creating a master tree data structure based on a present state of all deployment descriptor files; wherein the master tree data structure represents resources associated with the plurality of applications, wherein the master tree data structure includes a first sub-tree that corresponds to a first application of the plurality of applications; creating a first separate tree data structure based on a current state of source files in a first project directory of the plurality of directories associated with the first application, wherein the first separate tree data structure represents resources associated with the first application; comparing the first sub-tree that corresponds to the first application in the master tree data structure with the first separate tree data structure; and refreshing the master tree data structure based on the first separate tree data structure if the first sub-tree in the master tree data structure is different from the first separate tree data structure.

Susarla teaches a system of executing an application within an application server (para.58) wherein a master tree data structure is created based on a present state of all deployment descriptor files (para.104; para.139, lines 14-17; Fig.5; *system class loader is parent of all application*); wherein the master tree data structure represents resources associated with the plurality of applications (para.104; para.139, lines 14-17; Fig.5; *system class loader is parent of*

*all application*), wherein the master tree data structure includes a first sub-tree that corresponds to a first application of the plurality of applications (para.104; Fig.5; *application 100*); creating a first separate tree data structure based on a current state of source files in a first project directory of the plurality of directories associated with the first application, wherein the first separate tree data structure represents resources associated with the first application (para.131-137; *new loaders are created based on current state of files*); and refreshing the master tree data structure based on the first separate tree data structure if the first sub-tree in the master tree data structure is different from the first separate tree data structure (para.140-141, *old class loaders are replaced with the new class loaders*). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Susarla's teaching with Hapner's tool in order to save time by only updating those files which have been modified.

Furthermore, the system of Hapner and Susarla does not teach comparing the first sub-tree with the first separate tree data structure. Kiernan teaches a system of creating separate tree structures to be compared (Kiernan, col.3, lines 1-11, col.7, lines 34-37, col.10, lines 56-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Kiernan's teaching with the system of Hapner and Susarla in order to view the differences between the old and current versions of the files.

As per claim 6, the system of Hapner, Susarla, and Kiernan the system wherein the builder component is further capable of automatically updating the at least one deployment descriptor file to reflect one or more changes in at least one source code file associated with an application in the plurality of applications (Susarla, para.69).

As per claim 7, the system of Hapner, Susarla, and Kiernan teaches the system wherein a hierarchical representation that can include information pertaining to an archive file (Susarla, para.159).

As per claim 8, the system of Hapner, Susarla, and Kiernan teaches the system wherein the at least one deployment descriptor file can be expressed as an Extensible Markup Language document (Hapner, col.6, lines 57-63).

Claims 15 and 21 are similar in scope to claim 1, and are therefore rejected under similar rationale.

Claims 18-19 are similar in scope to claims 6-7, and are therefore rejected under similar rationale.

Claim 20 is similar in scope to claim 8, and is therefore rejected under similar rationale.

As per claim 29, the system of Hapner, Susarla, and Kiernan teaches the system wherein the builder component is capable of creating a tree data structure that embodies hierarchical relationships of nested XML statements (Hapner, col.6, lines 57-63).

As per claim 32, the system of Hapner, Susarla, and Kiernan the system of claim 1, further comprising:

a first user interface capable of rendering a hierarchical representation of the plurality of deployment descriptor files, wherein a component of the representation can be selected by a user; and a second user interface capable of rendering a user-editable representation of the selected component (Hapner, col.5, line 35-col.6, line 35).

6. Claims 2, 4-5, 16-17, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. ("Hapner", US 6,892,382), Susarla et al. ("Susarla", US 2004/0015936) and Kiernan et al. ("Kiernan", US 5,701,137) in view of Kemper et al. ("Kemper", US 6,804,682).

As per claim 2, the system of Hapner, Susarla, and Kiernan teaches user interface (Kiernan, Fig.2), however does not teach rendering of an error message. Kemper teaches a system of modifying software applications wherein a user interface is capable of rendering an error message (Kemper, col.10, lines 13-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Kemper's teaching with the system of Hapner, Susarla, and Kiernan in order to view the any problems with the new changes.

As per claim 4, the system of Hapner, Susarla, and Kiernan teaches creating deployment descriptor files (Hapner, col.6, lines 55-67). However, the system of Hapner, Susarla, and Kiernan does not teach the system further comprising a parser capable of generating a representation of the at least one deployment descriptor file and a validator capable of validating the at least one deployment descriptor file. Kemper teaches a system of modifying software applications comprising a parser capable of generating a representation of the at least one deployment descriptor file (Kemper, col.13, lines 35-37) and a validator capable of validating the at least one deployment descriptor file (Kemper, col.13, lines 38-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Kemper's teaching with the system of Hapner, Susarla, and Kiernan in order to build error free descriptor files.



As per claim 5, the system of Hapner, Susarla, Kiernan and Kemper teaches the system wherein the validator is capable of generating an error when it encounters a syntactic or semantic fault in the at least one deployment descriptor file (Kemper, col.10, lines 13-18).

Claims 16-17 are similar in scope to claims 4-5 respectively, and are therefore rejected under similar rationale.

As per claim 28, the system of Hapner, Susarla, and Kiernan teaches creating deployment descriptor files (Hapner, col.6, lines 55-67). However, the system of Hapner, Susarla, and Kiernan does not teach the system wherein the interactive tool is capable of automatically repairing a first deployment descriptor file if the first deployment descriptor is defective. Kemper teaches a system of modifying software applications capable of automatically repairing a first deployment descriptor file if the first deployment descriptor is defective (Kemper, col.22, lines 23-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Kemper's teaching with the system of Hapner, Susarla, and Kiernan in order to build error free descriptor files.

As per claim 33, the system of Hapner, Susarla, and Kiernan teaches creating deployment descriptor files (Hapner, col.6, lines 55-67). However, the system of Hapner, Susarla, and Kiernan does not teach the system wherein the builder component is further capable of generating a new deployment descriptor file for the first application from the refreshed master tree data structure. Kemper teaches a system of modifying software applications capable of generating a new deployment descriptor file for the first application from the refreshed master tree data structure (Kemper, col.24, lines 1-7). It would have been obvious to one of ordinary

skill in the art at the time of the invention to include Kemper's teaching with the system of Hapner, Susarla, and Kiernan in order to keep files updated

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. ("Hapner", US 6,892,382), Susarla et al. ("Susarla", US 2004/0015936), Kiernan et al. ("Kiernan", US 5,701,137) and Kemper et al. ("Kemper", US 6,804,682) in view of Chan et al. ("Chan", US 2003/0028364).

As per claim 3, the system of Hapner, Susarla, Kiernan and Kemper teaches the system of claim 2 wherein an error message is rendered (Kemper, col.10, lines 13-18). However, the system of Hapner, Susarla, Kiernan and Kemper does not teach wherein user selection of the error message can cause the second user interface to render a user-editable representation of the at least one deployment descriptor component that is in error. Chan teaches a system for manipulating a file wherein an error message and the associated position of the error is displayed (Chan, para.0036). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Chan's teaching with the system of Hapner, Susarla, Kiernan and Kemper in order to locate the error quickly.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. ("Hapner", US 6,892,382), Susarla et al. ("Susarla", US 2004/0015936), and Kiernan et al. ("Kiernan", US 5,701,137) in view of Birkler et al. ("Birkler", US 6,466,951).

As per claim 31, the system of Hapner, Susarla and Kiernan teaches the system wherein the builder component is further capable of allowing a module to be shared by both the first

application and a second application (para.103). However, the system of Hapner, Susarla and Kiernan does not teach disassociating the module from the first application in the master tree data structure, when the module is removed from the first application and keeping the module in the master tree data structure to allow the second application to use the module. Birkler teaches an interactive tool for synchronizing two files wherein a file stored on the current application may delete an item which is not deleted on the host or master application (Birkler, col.5, line 66- col.6, line 29). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Birkler's teaching with the system of Hapner, Susarla and Kiernan in order to prevent accidental deletion of items.

9. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. ("Hapner", US 6,892,382), Susarla et al. ("Susarla", US 2004/0015936), and Kiernan et al. ("Kiernan", US 5,701,137) in view of Bunnell (US 6,119,122).

As per claim 34, the system of Hapner, Susarla and Kiernan teaches deployment of descriptor files. However, the system of Hapner, Susarla and Kiernan does not teach a pane that displays a single field for a value, wherein the single field maps to multiple values in the at least one deployment descriptor file. Bunnell teaches a system of editing values in a directory of objects wherein the value may be chosen from a menu of values (Bunnell, col.8, lines 61-65; col.9, lines 18-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Bunnell's teaching with the system of Hapner, Susarla and Kiernan in order to edit information quickly.

***Response to Arguments***

10. Applicant's arguments with respect to Amendment filed 08/26/10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Broussard et al.(US 6,912,382) teaches a system of detecting changes between deployment descriptors and source code files.
- Selman (US 7,451,163) teaches a system of synchronizing data.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Communications***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajeda Muhebbullah whose telephone number is **(571) 272-4065**. The examiner can normally be reached on Wednesday/Thursday and alt. Mondays from 8:00 am to 4:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow, can be reached on (571) 272-7767.

The central fax number for the organization where correspondence for this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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